Chapter 2 – Alternatives

Chapter 2 of this draft environmental impact statement defines the alternatives that were developed for the six resource management plans of the planning area that are being revised.

In this chapter:

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Introduction

This chapter describes the No Action Alternative and three action alternatives. The No Action Alternative would continue the management of the current resource management plans, which were approved in 1995 and subsequently amended. The three action alternatives consist of a range of management strategies that are designed to meet the purpose and need discussed in *Chapter 1*. These management strategies encompass management objectives, management actions, and land use allocations.

- **Management objectives.** Descriptions that specifically describe the desired outcomes from the management of particular resources, which are usually expressed in terms that are quantifiable and measurable.
- **Management actions.** Proactive measures that will be applied to activities to achieve the management objectives for resources.
- **Land use allocations.** Identifiers that designate which activities are allowed, restricted, or excluded in all or part of a planning area.

Some management objectives, management actions, and land use allocations are common to all three action alternatives and some vary by action alternative. These differences would result in a variance in the degree or rate in which they achieve the identified purpose and needs for the proposed action.

Management Common to All Action Alternatives

This section identifies the management objectives and management actions that would apply under the three action alternatives. The next section identifies what is unique between the individual alternatives.

Management actions would be used only where and when necessary and practical to achieve management objectives. For example, the BLM may decide not to take a management action when:

- Site-specific circumstances would make the application of the management action unnecessary to achieve resource management plan objectives.
- Site-specific circumstances would make the application of the management action impractical.
- The application of the management action would be inconsistent with other resource management plan decisions.

Activities that are not specifically mentioned in the management actions would be permitted if they are consistent with management objectives.

Air

Management Objective

Prevent impacts to air quality in areas designated as Class I for air quality and nonattainment areas.

Management Actions

- Prescribed burns would be implemented in accordance with the Oregon Smoke Management Plan to reduce emissions, to avoid smoke intrusions into designated areas, and to avoid degrading the visibility in Class I areas.
- Dust palliatives would be used, as necessary, during timber hauling operations to reduce dust.

Cultural and Paleontological Resources including Native American Traditional Uses

Management Objective

Conserve scientific, traditional use, heritage, educational, public, and recreational values of cultural and paleontological resource sites.

Management Actions

- Ground-disturbing actions would avoid sites that are listed (or eligible for listing) on the National Register of Historic Places. If avoidance would not be practical, prior to disturbance the sites with scientific value would be salvaged through practices such as data recovery, which include excavation, relocation, or documentation.
- Cultural properties that are determined to be available for consideration as the subject of scientific or historical study would be classified as scientific use sites or experimental use sites.
- Unusual cultural properties that are not currently available for scientific or historical study, because of scarcity, a research potential that surpasses the current state of the art, singular historic importance, cultural importance, tribal importance, architectural interest, or comparable reasons, would be classified as *conservation for future use sites*. Sites would be selected for the purpose of retaining a representative sample of site types from those available in areas where conflicts with other resource management activities are not anticipated. These sites would be preserved.

- Cultural properties that are found to be appropriate for use as interpretive exhibits at their original location (i.e., in place) or found to be appropriate for related educational and recreational uses would be classified as *public use sites*. Priority locations for these interpretive exhibits would include developed recreation sites, recreation corridors, and locations where recreation is being promoted. These sites would be preserved.
- Cultural properties that are only important for their scientific values and whose research potential is effectively exhausted (ones where the salient information has been collected and preserved or has been destroyed by natural or human activity) would receive no special management.
- Significant cultural resource properties would be acquired for public, cultural heritage, and scientific purposes when such properties are adjacent to or inholdings of BLM-administered land.

Use sites

For complete descriptions of the use site classifications, search for 8110 (BLM Manual H-8110) at http://www.blm.gov.

- Cultural and paleontological resources that are threatened by natural processes or human activity would be excavated and the data would be recovered where warranted by the scientific importance of the site.

Energy and Minerals

Management Objective

Maintain existing opportunities and develop new opportunities for the exploration and development of locatable, leasable, and saleable energy and mineral resources, and for casual mineral prospecting.

Management Actions

- Areas would be available for energy and mineral resource exploration and development.
- Biomass would be recovered from harvesting actions, silvicultural treatments, and forest health and fuels treatments.
- New and existing quarry and pit sites would be used to provide economical sources of rock and aggregate. Existing quarry and pit sites, along with the areas involved in their incremental expansion, would be managed as existing facilities and would not be available for other management uses.

  See *Table 15 (Areas open or closed to energy and mineral developments)* for the areas that would be open or closed to energy and mineral developments. See *Appendix P. Energy and Minerals* for a reasonably

foreseeable development scenario for the BLM units within the planning area and the stipulation that would be applied to the developments.

Table 15. Areas open or closed to energy and mineral developments

Categories	Subcategories	Acres by BLM District					
		Salem	Eugene	Roseburg	Coos Bay	Medford	Klamath Falls
Federal Surface and Mineral Estate		398,100	318,000	425,600	329,600	866,300	212,000
Federal Minerals/Private Surface		27,800	1,300	1,700	12,200	4,700	21,000
Locatable (e.g., metallics and gemstones)							
Closed	Nondiscretionary	5,900	400	300	1,000	16,800	4,700
Closed	Discretionary	16,200	15,300	4,800	11,500	20,800	700
Open	Standard Restrictions/ Stipulations	49,200	290,600	366,200	99,500	536,500	191,600
Open	Additional Restrictions	326,800	10,000	20,800	217,600	293,400	37,900
Salable (e.g., sand, gravel, stone, clays, pumice)							
Closed	Nondiscretionary	5,900	100	30	600	--	300
Closed	Discretionary	220,400	9,100	8,400	14,700	--	14,500
Open	Standard Restrictions/ Stipulations	49,200	200	381,700	84,600	864,800	--
Open	Additional Restrictions	122,600	307,000	29,200	229,700	--	222,500
Leasable (e.g., oil, gas, geothermal, coal, chemical minerals)							
Closed	Nondiscretionary	5,900	100,000	30	1,600	22,000	300
Open	Standard Restrictions/ Stipulations	49,200	--	356,300	101,400	232,500	--
Open	Additional Restrictions	122,000	138,000	53,300	56,300	539,700	197,600
Open	No Surface Occupancy	221,000	177,000	9,700	170,300	73,300	40,800

Fire and Fuels Management

Management Objectives

- Promote ecosystem function and resiliency.
- Reduce the fire hazards to communities that are at risk from uncharacteristic wildfires.
- Decrease the risk of large wildfires, and reduce the cost and associated hazard of fire suppression.
- Reduce the risk of resource damage due to uncharacteristic wildfires.

Management Actions

- Prescribed burns would be used to emulate natural fire occurrences and processes.
- Ecosystems with the highest risk of uncharacteristic wildfires and the greatest potential for risk reduction would receive priority for fuels treatments.
- Silvicultural treatments would be applied in oak woodlands to create open conditions with large fire-resistant oaks.
- Silvicultural treatments would treat hazardous fuels, particularly in wildland urban interface areas. See *Map 6 (Wildland urban interface)*.
- Immediate action to control and suppress all wildfires would be taken in all areas, except in the large contiguous blocks of BLM lands, which are Galice, Wild Rogue Wilderness, Rogue River Wild and Scenic River in the Medford District, and the Gerber Block in the Klamath Falls Field Office, where aggressive initial attack and direct control procedures would be employed.
- Fire-suppression activities in the large contiguous blocks of BLM lands, which are Galice, Wild Rogue Wilderness, Rogue River Wild and Scenic River in the Medford District, and the Gerber Block in the Klamath Falls Field Office, would include direct control, perimeter control, and prescription control. See *Map 6 (Wildland urban interface)*.
- Fuels treatment would be applied to stands of any age in order to reduce the fuel hazards. Fuel treatments would include tree cutting, brush cutting, pruning, reducing crown bulk density, treating activity fuels, and prescribed burning.
- Vegetation removal would occur around ponds that are constructed for fire management for safety or operational reasons.

Fish

Management Objectives

- Restore stream complexity.
- Restore access to stream channels for all life stages of fish species.
- Prevent livestock from causing trampling disturbances to spawning beds where federally listed salmonid fish species occur.

Management Actions

- Priority for restoration activities would be given to projects in streams with a high intrinsic potential for fish and to high-priority fish populations that have been defined in recovery plans.
- Stream complexity would be restored through the placement of large wood and boulders.
- New and replacement stream-crossing structures on fish-bearing streams would be designed to provide access within stream channels for fish.
- For streams with salmonid species listed under the Endangered Species Act, livestock would not be released into riparian areas until 30 days following the emergence of salmonids from spawning beds.

Grazing

Management Objective Pertinent Only to the Coos Bay District, Medford District, and the Klamath Falls Resource Area of the Lakeview District

Provide livestock grazing permits and leases while maintaining or improving public rangelands.

Management Actions Pertinent Only to the Medford District and the Klamath Falls Resource Area of the Lakeview District

- Livestock grazing would be managed in accordance with the *Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington*. See:
  - *Map 7 (Lands available for livestock grazing)*
  - *Appendix L. Grazing (Grazing Allotments in the Klamath Falls Resource Area and the Medford District)*

– *Appendix L. Grazing (Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Oregon and Washington)*

- Grazing levels and management practices would be maintained for the allotments. Adjustments would be made to meet or make progress toward meeting the standards for rangeland health for Oregon and Washington. See *Appendix L. Grazing (Grazing Allotments in the Klamath Falls Resource Area and the Medford District)*
- Areas disturbed by natural and human-induced events, including wildland fire, prescribed burns, timber-management treatments, and juniper cuts, would be rested from livestock grazing, except where grazing would either not impede site recovery or where grazing could be used as a tool to aid in achieving recovery objectives. Livestock grazing would be resumed after soil and vegetation had sufficiently recovered to support livestock grazing.
- Livestock grazing would be authorized through management agreements, temporary nonrenewable grazing permits or leases, or special-use permits on lands that are not available through the issuance of a grazing lease or permit.
- Prescribed livestock grazing would be used to control invasive plants, reduce fire danger, or accomplish other management objectives.

Management Action Pertinent Only to the Coos Bay District

The authorization of livestock grazing through the issuance of grazing leases would be discontinued. However, grazing would be authorized through management agreements, temporary nonrenewable grazing permits or leases, or special-use permits in a manner that is consistent with the grazing regulations.

Management Actions Pertinent Only to the Klamath Falls Resource Area of the Lakeview District

- The authorization of livestock grazing through the issuance of grazing leases would be discontinued, in whole or in part, for the grazing allotments identified in *Table 16 (Allotments not available for livestock grazing in the Klamath Falls Resource Area)*.
- Grazing would not continue to be authorized under Section 15 of the Taylor Grazing Act (43 U.S.C. §315 et seq.) for the allotments listed in *Table 16*. However, grazing would be authorized through management agreements, temporary nonrenewable

Rangeland standards

For the rangeland health standards and livestock grazing guidelines document, search for the document by its complete title at http://www.blm.gov.

grazing permits or leases, or special-use permits in a manner that is consistent with the grazing regulations.

Table 16. Allotments not available for livestock grazing in the Klamath Falls Resource Area

Allotment Name	Allotment Number	Acres	Forage Allocation (AUMs)
Edge Creek*	00102	5,950	---
Plum Hills	00813	160	20
	Totals	6,110	20

*The portion of the Upper Klamath Scenic River within the Edge Creek Allotment would be closed to grazing. This portion of the allotment was not allocated any AUMs (animal unit months). The remainder of the allotment would be available for grazing as described in Appendix L. Grazing (Grazing Allotments in the Klamath Falls Resource Area and the Medford District).

- Exclosures or other areas, as identified on *Table 17 (Exclosures or other areas closed to grazing in the Klamath Falls Resource Area)*, would be closed to grazing, except as scheduled.
- Range improvements would be developed in the Klamath Falls Resource Area as described in *Appendix L. Grazing* and *Map 8 (Location of proposed range improvements in the Klamath Falls Resource Area)*.

Table 17. Exclosures or other areas closed to grazing in the Klamath Falls Resource Area

Allotment Name	Allotment Number	Areas Closed within Allotments
Edge Creek	00102	Hayden Creek Exclosures (2) Fox Lake Exclosure
Buck Lake	00104	Tunnel Creek Exclosure Surveyor Campground Exclosure
Dixie	00107	Dixie (Long Prairie Creek) Exclosure
Stukel-O'Neil	00822	Aspen Exclosure
Rodgers	00852	Van Meter Flat Reservoir Exclosure
Yainax	00861	Bull Spring Exclosure Timothy Spring Exclosure
Bear Valley	00876	Holbrook Spring Exclosure
Bumpheads	00877	Bumpheads Reservoir Outlet Exclosure Antelope Creek Exclosure
Horsefly	00882	Long Branch Exclosure Caseview Spring Exclosure Norcross Spring Exclosure (area within the spring exclosure fence) Boundary Spring Exclosure Barnes Valley Riparian Pasture (except as scheduled)
Pankey Basin	00884	Pankey Creek Riparian Exclosure
Dry Prairie	00885	Ben Hall Creek Riparian Pasture (except as scheduled)
Horse Camp Rim	00886	21 Reservoir Exclosure
Pitchlog	00887	Pitchlog Creek Exclosure Willow Spring Exclosure CCC Spring Exclosure
Willow Valley	00890	East Fork Lost River Exclosure Duncan Spring/Antelope Creek Exclosures (2) Antelope Riparian Pasture (except as scheduled)
Wood River	30855	Entire area excluded from regular grazing use, except as a tool to support wetland restoration

Management Actions Pertinent Only to the Medford District

- The authorization of livestock grazing through the issuance of grazing leases would be discontinued, in whole or in part, for the grazing allotments identified in *Table 18 (Allotments not available for livestock grazing in the Medford District)*.
- Grazing would not be authorized under Section 15 of the Taylor Grazing Act (43 U.S.C. §315 et seq.) for the allotments listed in *Table 18*. However, grazing could be authorized through management agreements, temporary nonrenewable grazing permits or leases, or special-use permits in a manner that is consistent with the grazing regulations.

> **Taylor Grazing Act**
>
> For the complete act and its regulations, search for Title 43 and all sections starting with Section 315 at http://uscode.house.gov.

- Range improvements would be implemented to achieve the Oregon standards for rangeland health or other allotment-specific objectives.

Table 18. Allotments not available for livestock grazing in the Medford District

Allotment Name	Allotment Number	Acres	Forage Allocation (AUMs)
Trail Creek	10003	12,868	113
Longbranch*	10004	10,844	71
Antioch Road	10005	40	4
Roundtop Evans	10006	27,086	110
West Perry Road	10010	75	10
East Perry Road	10011	40	7
Obenchain Mountain	10014	120	12
Nichols Gap	10018	280	18
Eagle Point Canal	10020	465	55
Shady Branch	10025	320	32
Derby Station	10030	540	36
West Derby	10034	1,120	89
Emigrant Creek	10111	40	7
Baldy	10120	798	87
Lost Creek	10123	80	6
Cartwright	10127	40	4

Table continues on the next page.

Allotment Name	Allotment Number	Acres	Forage Allocation (AUMs)
Bybee Peak	10144	321	36
Stiehl	10210	175	18
Fielder Creek	10211	40	5
Del Rio	10216	40	5
Sugarloaf/Greensprings	20158	2,926	210
Applegate	20201	25,518	294
Tunnel Ridge	20202	2,183	14
Timber Mountain	20204	1,720	70
Sardine and Galls Creek	20205	3,765	158
Sterling Creek	20207	29,209	190
Spencer Gulch	20208	1,935	150
Quartz Gulch	20209	680	9
Burton Butte	20212	5	2
Chapman Creek	20213	3,309	81
Ecker	20217	40	6
Stage Road	20218	40	4
Lomas Road	20222	635	50
Star	20223	118	24
Pickett Mountain	20302	820	30
Jump Off Joe	20303	80	8
Deer Creek*	20308	278	0
Reeves Creek	20309	1,672	95
Q Bar X	20310	15	3
Esterly Lake	20312	4,457	152
Glade Creek	20315	560	17
Cherry Gulch	20316	40	6
	Totals	135,337	2,298

*These portions of the Longbranch and Deer Creek Allotments would be closed to grazing. The remainder of the allotments would be available for grazing as described in *Appendix L. Grazing.*

Hazardous Materials

Management Objectives

- Limit the use of hazardous materials.
- Eliminate hazardous wastes.

Management Actions

- Response to hazardous material incidents would include cleanup, proper notifications, criminal investigations, and site assessments.
- Hazardous materials would be stored, treated, and disposed of in accordance with applicable laws and regulations.
- Employees and the public would be protected from known hazardous materials on BLM-administered lands.

Lands, Realty, Access, and Transportation

Management Objectives

- Make land tenure adjustments to facilitate the management of resources.
- Provide legal access to BLM-administered lands and facilities adequate to support resource management programs.
- Provide needed right-of-ways for access to nonfederal lands in a manner that is consistent with federal, state, and local planning goals and rules.
- Provide a road transportation system that serves resource management needs.
- Protect lands that have important resource values or substantial levels of investment by withdrawing them, where necessary, from the implementation of nondiscretionary public land and mineral laws.

Management Actions

- Lands in Zone 1 would be retained under BLM administration. Lands in Zone 1 include:
  - National Landscape Conservation System designated lands
  - areas of critical environmental concern
  - research natural areas
  - outstanding natural areas
  - recreation sites
  - critical habitat for threatened or endangered species

Land Zones
Zone 1: Retain for continuing resource development.
Zone 2: Available for exchange to facilitate management.
Zone 3: Available for sale or exchange to facilitate management.
See *Table 137 (Acres of land tenure zones by district)* in *Chapter 3* and *Appendix O. Lands*.

- Lands in Zone 2 would be available for exchange to enhance public resource values, improve management capabilities, and reduce the potential for land use conflict. Zone 2 lands are not specifically listed. They consist of all lands not listed in the description of Zone 1 lands and the lands listed in *Appendix O. Lands*.
- Lands in Zone 3 would be available for disposal. These lands would include:
  - lands that are not practical or are uneconomical to manage (because of their intermingled location and unsuitability for management by another federal agency)
  - survey hiatuses
  - encroachments

  Survey hiatuses and encroachments that are discovered in the future would be assigned to Zone 3. See *Map 28 (Location of land tenure Zone 3)*.
- The acres of O&C lands of all classifications, and the acres of O&C and public domain lands that are available for harvesting, would not be reduced through disposal, exchange, or purchase. This standard would be met by evaluating the total net change in land tenure in the planning area at 10-year intervals.
- Lands would be acquired or disposed of to facilitate resource management objectives as opportunities occur. See *Appendix O. Lands*.
- Public domain lands that have been under Section 7 of the Taylor Grazing Act would be available for disposal.

- Newly acquired lands would be managed for the purpose for which they were acquired or in a manner that is consistent with the management objectives for adjacent BLM-administered lands.
- Temporary-use permits, as identified under the Federal Land Policy and Management Act (Section 302), would be issued for a variety of uses, such as, but not limited to, stockpile and storage sites and as tools to authorize unintentional trespass situations pending final resolution.
- No leases or permits would be issued for landfills or other disposal facilities.
- Land-use authorizations would be used to resolve agricultural or occupancy trespasses, where appropriate.
- Existing leases and permits would be recognized as valid uses.
- Lands would be withdrawn from the operation of public land and mineral laws, where appropriate, to avoid the damage that would be caused by nondiscretionary activities. See *Appendix O. Lands*.
- Withdrawals would be limited to the area needed and would restrict only those activities needed to accomplish the purposes of the withdrawal.
- Lands would be available for right-of-ways.
- Class I visual resource management areas, such as wild and scenic rivers that are classified as wild, wilderness areas, and wilderness study areas, would be *right-of-way exclusion areas* (i.e., right-of-ways would not be granted).
- Recreation sites, areas of critical environmental concern, research natural areas, wild and scenic rivers that are classified as scenic and recreational rivers, and Class II visual resource management areas would be *right-of-way avoidance areas* (i.e., right-of-ways would be granted where no practicable alternative was available).
- Existing right-of-ways would be recognized as valid uses.
- Access across BLM lands to nonfederal lands would be granted, except within the National Landscape Conservation System designated lands.
- Utility corridors would be the preferred location for energy transmission or distribution facilities. Corridors would generally be 1,000 feet on each side of the centerline unless otherwise designated. No development or management activities would be permitted that would conflict with construction, operation, or maintenance of facilities corresponding to the purpose of the utility corridor. See *Map 9 (Utility corridors)*.
- Communication facilities would be allowed on existing communication sites. See *Map 9 (Utility corridors)* and *Appendix O. Lands*.

- Reasonable expansion of existing communication sites and the development of new sites would be allowed. The priority for accommodating the need for additional capacity would be the use of existing sites.
- Existing roads would be managed to protect resource values, to provide for safety, to protect facility investment, and to provide access for management activities. Trees would be removed along roads for safety or operational reasons.
- New permanent or temporary roads, and stream-crossing structures, would be constructed for the implementation of management actions.
- Roads that are not needed for long-term management would be decommissioned. Roads would be temporarily closed or travel would be restricted for administrative and resource purposes.

National Landscape Conservation System

The National Landscape Conservation System designations on BLM lands in western Oregon include:

- wild and scenic rivers
- wilderness, wilderness study, and wilderness instant study areas
- a national monument
- a national scenic trail
- an outstanding natural area
- a scenic corridor
- a watershed management unit

Management Objective

Conserve, protect, and restore the identified outstanding cultural, ecological, and scientific values of the National Landscape Conservation System designated lands.

Management Actions

Wild and scenic rivers

- Designated wild and scenic river corridors (including those classified as wild, scenic, or recreational) would be managed to protect their outstandingly remarkable values and to enhance the natural integrity of river-related values.

See *Table 58 (District-specific designated wild and scenic rivers and river segments)*.

- Interim protection would be provided to wild and scenic river corridors (including those classified as wild, scenic, or recreational) that are suitable for inclusion as components of the National Wild and Scenic Rivers System.

  See *Table 59 (District-specific suitable wild and scenic rivers and river segments)*.

- Interim protection would be provided to wild and scenic river corridors (including those classified as wild, scenic, or recreational) that are eligible but have not yet been studied for suitability as components of the National Wild and Scenic Rivers System.

  See *Table 60 (District-specific eligible wild and scenic rivers and river segments)*.

Wilderness Areas

Wilderness areas would be managed to preserve the undisturbed natural integrity of these areas.

See *Table 61 (District-specific wilderness areas)*.

Wilderness Study Areas and Wilderness Instant Study Areas

Wilderness study areas and wilderness instant study areas would be managed to maintain wilderness suitability.

See *Table 48 (District-specific wilderness study areas and wilderness instant study areas)*.

Cascade-Siskiyou National Monument

The Cascade-Siskiyou National Monument (located in the Medford District) would be managed to protect the geophysical, botanical, and other biological features for which the area was designated.

See *Table 63 (District-specific miscellaneous National Landscape Conservation System designated lands)*.

Pacific Crest National Scenic Trail

The portion of the Pacific Crest National Scenic Trail that is located in the Medford District and the Klamath Falls Resource Area of the Lakeview District would be managed for outdoor recreational opportunities while conserving its scenic, historic, natural, and cultural values.

See *Table 63 (District-specific miscellaneous National Landscape Conservation System designated lands)*.

Yaquina Head Outstanding Natural Area

The Yaquina Head Outstanding Natural Area (located in the Salem District) would be managed to promote the conservation of scenic, historic, natural, and cultural values, and for educational, scientific, and recreational opportunities.

See *Table 63 (District-specific miscellaneous National Landscape Conservation System designated lands)*.

Mt. Hood Corridor

BLM lands within the Mt. Hood Corridor (located in the Salem District) would be managed to protect and enhance scenic quality. Timber harvesting would be excluded, except to maintain safe conditions for the visiting public, to control the continued spread of wildfires, and for activities related to the administration of the corridor.

See *Table 63 (District-specific miscellaneous National Landscape Conservation System designated lands)*.

Note: The Oregon Parks and Recreation Department (Oregon State parks), Oregon Department of State Lands, Portland General Electric (PGE), and a mixture of county, local, and private owners administer the remaining lands in this corridor.

Bull Run Watershed Management Unit

BLM lands within the Bull Run Watershed Management Unit (located in the Salem District) would be managed to protect and enhance water quality. Timber harvesting would be excluded, except, as necessary, to protect or enhance water quality, or except, as necessary, for the construction, expansion, protection, or maintenance of facilities for either a municipal water supply or the transmission of energy.

See *Table 63 (District-specific miscellaneous National Landscape Conservation System designated lands)*.

Note: This watershed is the source of the Portland metropolitan area's domestic water supply and is congressionally designated and separate from other watersheds that are administratively designated. Also note that the United States Forest Service and the Portland Water Bureau administer the greater portion of the lands in this unit.

Plants, Fungi, and Invasive Species

Management Objective

Provide for the conservation of species that are listed or are candidates for listing under the Endangered Species Act or state listed species where the BLM have entered into a cooperative management agreement for a species.

Management Action

- Management would be consistent with recovery plans and designated critical habitat, including: the protection and restoration of habitat; altering the type, timing, and intensity of actions; and other strategies designed to recover populations of species.
- Species listed under the state of Oregon Endangered Species Act would be managed in accordance with cooperative management agreements.

Plants with recovery plans are listed in *Table 19 (Federally listed plants with recovery plans)*. Also see *Appendix E. Botany (Digest of Actions Contained in Individual Recovery Plans for Plant Species)*.

Table 19. Federally listed plants with recovery plans

Common Name	**Scientific Name**
Nelson's checker-mallow	*Sidalcea nelsonia*
Rough popcorn flower	*Plagiobothrys hirtus*
Gentener's fritillary	*Fritillary gentneri*
Kincaid's lupine	*Lupinus sulphureus spp. kincaidii*
Western lily	*Lilium occidentale*
Bradshaw's lomatium	*Lomatium bradshawii*
McDonald's rock-cress	*Arabis mcdonaldiana*
Golden paintbrush	*Castelleja levisecta*
Applegate's milk-vetch	*Astaragalus applegatei*
Water howellia	*Howellia aquatilis*

Management Objective

State listed species where the BLM has not entered into a conservation agreement and species listed by the BLM as sensitive or assessment species will be managed on public domain lands and on O&C lands where protection does not conflict with sustained yield forest management in areas dedicated to timber production. This is so that special status designation would no longer be warranted and so that actions will not contribute to the need to list the species under the Endangered Species Act. Where conflicts with sustained yield management occur, protections on O&C lands will only be applied to prevent extinction of a species even if it is not yet listed under the Endangered Species Act.

Management Actions

- Conservation plans for the following plants would be implemented and are incorporated by reference. Management would be consistent with conservation plans. Plants with conservation plans are listed in *Table 20 (Special status species plants with conservation plans)*. Also see *Appendix E. Botany (Digest of Conservation Plans for Special Status Species Plants)*.

Table 20. Special status species plants with conservation plans

Common Name	**Scientific Name**
Large-flowered rush-lily	*Hastingsia bracteosa*
Purple-flowered rush-lily	*Hastingsia atropurpurea*
Mendocino gentian	*Gentiana setigera*
Oregon willow-herb	*Epilobium oreganum*
Kincaid's lupine	*Lupinus sulphureus spp. kincaidii*
Western bog violet	*Viola Primulifolia ssp. occidentalis*
Umpqua mariposa lily	*Calochortus umpquaensis*
Green gentian or Umpqua swertia	*Frasera umpquaensis*
Tall bugbane	*Cimicifuga elata*
Gormans's aster	*Aster gormanii*
Crinite mariposa lily	*Calochortus coxii*
Silvery phacelia	*Phacelia argentea*
Columbia cress	*Rorippa columbiae*

- Special status species plants without conservation plans would be managed to maintain or restore populations and habitat.
- Protections measures include altering the type, timing, and intensity of actions; and other strategies designed to maintain populations of species.

Management Objective

Support natural species composition and vegetation on noncommercial areas, including, noncommercial forests, oak woodlands, shrublands, grasslands, cliffs, rock outcrops, talus slopes, meadows, wetlands, springs, fens, ponds, and vernal pools.

Management Actions

- Natural processes, native species composition, and vegetation structure would be maintained or restored. Management would include the use of prescribed burns, the retention of legacy components (e.g., large trees, snags, and down logs), and the removal of encroaching vegetation in meadows, grasslands, or oak woodlands in a manner that is consistent with natural or historic processes and conditions.

- Degraded or disturbed areas would be revegetated with species appropriate to the native or historic plant communities.
- Road construction, road maintenance, and culvert replacement would be designed to retain or reconnect the hydrologic flows to wetlands, springs, fens, ponds, and vernal pools.

Management Objective

Avoid the introduction of invasive plants or the spread of invasive plant infestations that are preventable.

Management Actions

- Cost-effective measures would be implemented to prevent, detect, and rapidly control new invasive plant infestations.
- Manual, mechanical, cultural, chemical, and biological treatments would be used to manage invasive plant infestations.
- Invasive plants would be controlled in accordance with the final environmental impact statement and record of decisions for the Northwest Area Noxious Weed Control Program. These documents are incorporated by reference.

Special Forest Products

Management Objective

Provide for the harvest and collection of special forest products.

Management Actions

- Special forest product collection would be implemented in a manner that limits adverse impacts to other resources. This would be accomplished by restricting collection amounts and restricting collection activities.
- Stipulations would be included in permits issued for the collection of special forest products to limit adverse impacts to the plant community, individual plants, soil, and water.
- Areas for the collection of individual special forest products would be rotated to maintain the availability of special forest products.

Recreation

Management Objective

Provide a diversity of developed and dispersed outdoor recreational opportunities that contribute to meeting recreational demand and quality visitor experiences.

See the tables and maps at the end of this chapter for district-specific recreation information.

Management Actions

- Legal public access would be obtained to BLM lands that have high recreational potential.
- Special recreation management areas would be managed in accordance with their planning frameworks (see *Appendix J. Recreation* and *Map 18 (Recreation management areas)*). These frameworks describe implementation-level actions that would achieve recreational management objectives for those areas.
- Lands not designated as special recreation management areas would be managed as extensive recreation management areas for dispersed recreational opportunities.
- Recreational developments, including sites, trails, and backcountry byways, would be maintained.
- Potential recreational developments, including sites, trails, and backcountry byways, would be developed in the future depending on recreational demand and feasibility.
- Locatable mineral withdrawals would be obtained for recreational developments that contain mineral development potential.
- Closed or abandoned logging roads would be developed to provide additional trail opportunities.
- Service-oriented and outreach programs, including interpretation and education, would be provided to visitors.
- Environmental education areas would be managed to provide educational opportunities for the public.
- Recreation sites authorized under the Recreation and Public Purposes Act would be managed according to their lease agreements.
- A 77-acre portion of Heceta Dunes on the Eugene District would be designated as open to off-highway vehicle use.
- Areas listed in *Table 54 (District-specific areas closed to off-highway vehicle use)* would be designated as closed to off-highway vehicle use.

See *Map 10 (Off-highway vehicle designations) and Map 26 (Proposed Off Highway Vehical designations)*.

- Areas not designated as open or closed would be designated as *limited to existing roads and trails* or *limited to designated roads and trails*. See *Table 53 (District-specific off-highway vehicle area designations)* and *Map 10 (Off-highway vehicle designations) and Map 26 (Proposed Off Highway Vehical designations)*.
- Areas listed in *Table 55 (District-specific off-highway vehicle emphasis areas)* would be designated as off-highway vehicle emphasis areas. These designations would be located within areas that are limited to designated roads and trails where off-highway vehicle use is more concentrated and intensively managed. See *Map 11 (Off-highway vehicle emphasis areas)*.
- Potential off-highway vehicle emphasis areas listed in *Table 56 (District-specific potential off-highway vehicle emphasis areas)* would be developed in the future depending recreational demand and feasibility.
- Off-highway vehicle areas and off-highway vehicle emphasis areas would be managed according to interim management guidelines until subsequent comprehensive travel management plans are completed. See *Appendix J. Recreation*. Detailed maps are available to the public at each district office that show proposed off-highway vehicle area designations with a preliminary road and trail network.
- Lands within state scenic waterway corridors (see *Table 57 (District-specific Oregon State scenic waterways)*), excluding portions that occur on O&C lands that are suitable for permanent timber production, would be managed to protect and enhance identified scenic, aesthetic, recreation, scientific, research, fish, and wildlife qualities.

Research

Management Objective

Provide for research to support the management of lands and resources administered by the BLM in western Oregon.

Management Action

Ongoing research projects would be continued according to current or updated study plans. New research projects would require study plans. Management actions on study sites that conflict with research objectives would be deferred until the research is complete.

Soils

Management Objective

Improve or maintain soil productivity.

Management Action

Management activities associated with prescribed burns, wildfire suppression, silviculture, timber harvesting, and grazing would be consistent with maintaining or improving soil productivity.

Timber

Management Objective

Assure the survival of planted trees and enhance the growth of desirable trees in harvested or disturbed areas.

Management Actions

- Newly harvested and inadequately stocked areas would be prepared for the regeneration of desirable tree species.
- Site preparation methods would include mechanical or manual procedures, and prescribed burns.
- Adequate reforestation would be achieved as promptly as practical following timber harvests, as follows:
  - Harvested areas would be planted with indigenous commercial tree species.
  - Identified root disease centers would be planted with indigenous disease-resistant tree species.
  - Genetically selected stock would be used to the extent available.
- The establishment and survival of coniferous seedlings would be promoted through maintenance and protective treatments.

Management Objective

Enhance the health, stability, growth, vigor, and economic value of forest stands in the harvest land base.

Management Actions

- Lands currently growing primarily brush or hardwoods would be converted to the appropriate conifer species, unless the hardwoods would produce a higher net monetary return.
- Precommercial thinning would be applied to forest stands that exceed healthy density levels.
- Fertilizer would be applied to forest stands that are at suitable density levels and where treatment is expected to provide a positive economic return.
- Pruning would be applied to enhance timber value in a manner that is consistent with fuels and disease management.
- Yarding corridors or new roads would be permitted within riparian management areas if no practical alternative exists to access adjacent uplands.
- Uneven-aged management would be applied in the eastern portion of the Klamath Falls Resource Area.
- Incidental harvest of trees associated with implementing management actions would occur from lands that are not in the harvest land base for safety or operational reasons.

Visual Resource Management

See *Map 1 (Visual resource management classes)* and *Table 21 (Acres of visual resource management classes by district)* after the fourth management objective.

Management Objective

Preserve the existing character of the landscape in Class I visual resource management areas.

Management Action

Designated, suitable, and eligible wild and scenic rivers that are classified as wild, wilderness areas, wilderness study areas, and wilderness instant study areas would be designated as Class I visual resource management areas.

These areas would be managed in accordance with natural ecological changes. Some very limited management activities would occur in these areas. The level of change to the characteristic landscape would be very low and would not attract attention. Changes would repeat the basic

elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

Management Objective

Retain the existing character of the landscape in Class II visual resource management areas.

Management Action

Designated, suitable, and eligible wild and scenic rivers that are classified as scenic, the Cascade-Siskiyou National Monument, the Pacific Crest National Scenic Trail, the Mt. Hood Corridor, the Bull Run Watershed Management Unit, and the Yaquina Outstanding Natural Area would be designated as Class II visual resource management areas. See *Table 63 (District Specific Miscellaneous National Landscape Conservation System designated lands*).

These areas would be managed for low levels of change to the characteristic landscape. Management activities would be seen but would not attract the attention of the casual observer. Changes would repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

Management Objective

Partially retain the existing character of the landscape in Class III visual resource management areas.

Management Action

Designated, suitable, and eligible wild and scenic rivers that are classified as recreational would be designated as Class III visual resource management areas.

These areas would be managed for moderate levels of change to the characteristic landscape. Management activities would attract attention but would not dominate the view of the casual observer. Changes would repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

Management Objective

Allow for major modification of the existing character of the landscape in Class IV visual resource management areas.

Management Action

All lands that are not designated as Class I, Class II, or Class III would be designated as Class IV visual resource management areas.

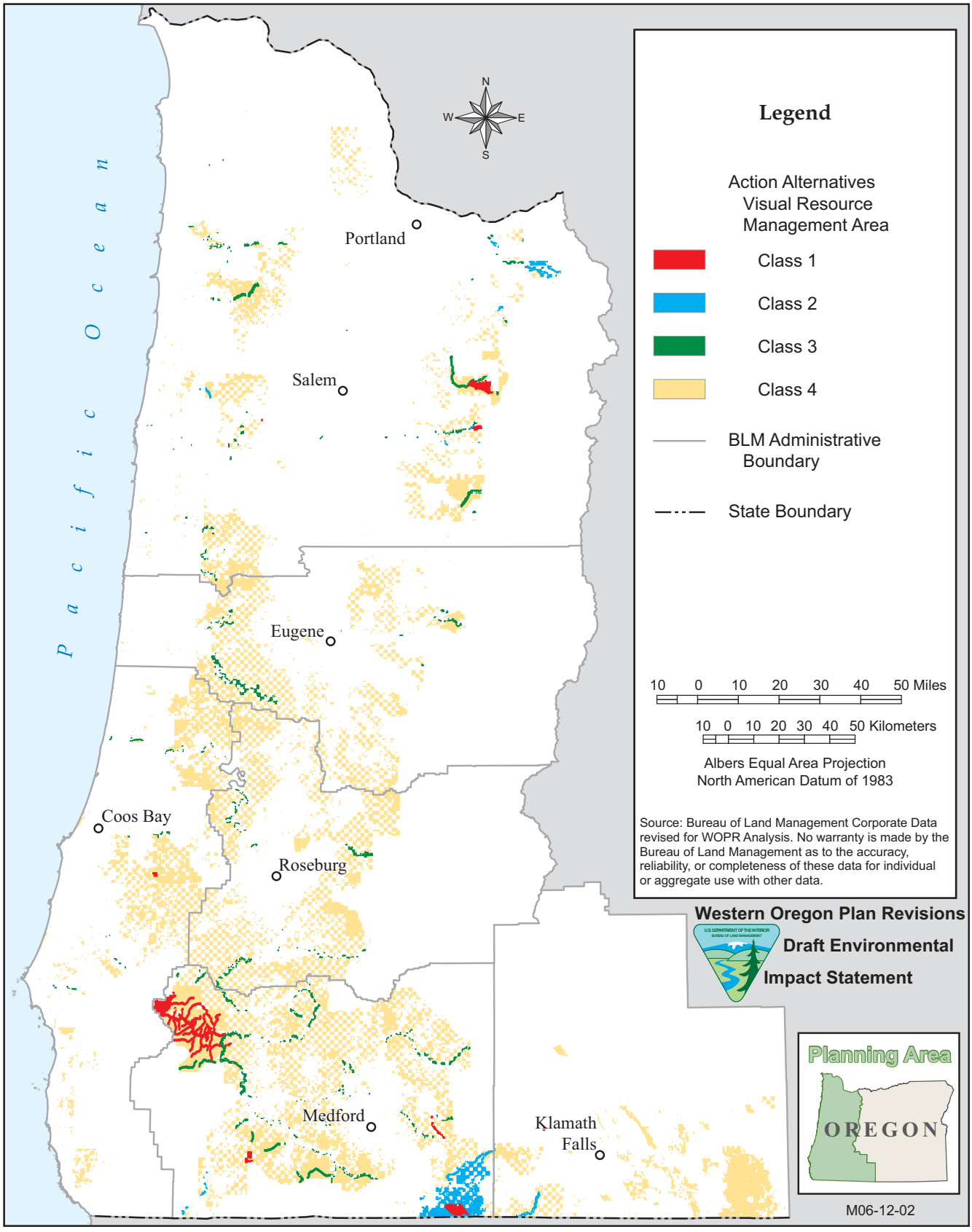
These lands would be managed for high levels of change to the characteristic landscape. Management activities would dominate the view and would be the major focus of viewer attention.

Table and Map for the Visual Resource Management Classes

Table 21. Acres of visual resource management (VRM) classes by district

Visual Resource Management (VRM) Classes	No Action Alternative (acres)	All Action Alternatives (acres)
Salem District		
VRM Class I	14,100	7,550
VRM Class II	22,800	7,627
VRM Class III	59,600	16,313
VRM Class IV	301,600	371,705
Eugene District		
VRM Class I	0	0
VRM Class II	4,471	0
VRM Class III	33,130	8,183
VRM Class IV	277,499	307,062
Roseburg District		
VRM Class I	28	0
VRM Class II	18,045	0
VRM Class III	4,385	6,409
VRM Class IV	396,546	419,952
Coos Bay District		
VRM Class I	600	592
VRM Class II	6,600	0
VRM Class III	14,700	1,958
VRM Class IV	307,700	319,700
Medford District		
VRM Class I	14,330	51,427
VRM Class II	113,880	51,564
VRM Class III	393,100	27,797
VRM Class IV	337,220	737,370
Klamath Falls Resource Area		
VRM Class I	0	340
VRM Class II	33,500	2,961
VRM Class III	81,800	0
VRM Class IV	96,700	221,600
Totals for all western Oregon BLM lands		
VRM Class I	29,058	59,909
VRM Class II	199,296	62,152
VRM Class III	586,715	60,660
VRM Class IV	1,717,265	2,377,389

Map 1. Visual resource management classes



Water

Management Objectives

- Maintain and restore water quality.
- Maintain and restore the proper functioning condition of riparian and wetland areas to provide shade, sediment filtering, and surface and stream bank stabilization.

Management Actions

- Priority for restoration, road maintenance, or road decommissioning would be given to projects that reduce chronic sediment inputs along stream channels and floodplains in source water areas.
- Prescribed burns would be applied in riparian management areas to reduce the potential for uncharacteristic wildfires.
- Best management practices (see *Appendix I. Water*) would be implemented to meet water quality standards.

Riparian Management Area Land Use Allocation for the Nonforest Areas of the Medford District and the Klamath Falls Resource Area of the Lakeview District

The following management actions are common to all of the alternatives but are specific to the nonforest areas of the riparian management areas.

Riparian management areas would be delineated by the water influence zone as indicated by hydrophilic vegetation.

Management Objective

Maintain and restore the proper functioning condition of riparian and wetland areas.

Management Actions

- Livestock grazing in riparian management areas would be managed at a level that allows the maintenance or development of the proper functioning condition of riparian and wetland plant communities. Methods would include installing and maintaining livestock exclosures, managing season of use and intensity, and implementing other appropriate techniques.
- Perennial and intermittent streams, wetlands, lakes, and natural ponds would be managed to maintain, improve, or restore floodplain connectivity.
- Conifer encroachment would be removed in riparian management areas unless conifers are an appropriate component of the riparian community type.

Wild Horses

Management Objective

Maintain a healthy population of wild and free-roaming horses in the Pokegama Herd Management Area of the Klamath Falls Resource Area of the Lakeview District. See *Map 12 (Location of Pokegama Herd Management Area)*.

Management Actions

- Horses would be gathered to maintain the established appropriate management level of 30 to 50 head, as follows:
  - During gathers, the number of horses would normally be reduced to the low end of the appropriate management level, and then allowed to increase to the top end of the appropriate management level before another gather occurred.
  - Horses would be removed from private land at private landowner request.
  - Horses straying outside the herd management area would be removed or returned to the herd management area.
- Horses from other herd areas would be periodically introduced to the Pokegama herd to maintain the viable genetic diversity of the herd.
- Water developments would be maintained or established to provide season-long water for wild horses within the herd management area. See *Appendix L. Grazing* and *Map 8 (Location of proposed range improvements in the Klamath Falls Resource Area)*.
- The appropriate management level would be adjusted when:
  - Monitoring data identified a change in long-term forage availability.
  - Health assessments and evaluations determined that wild horse numbers, or patterns of grazing use, were a contributing factor toward not meeting one or more of the Oregon standards for rangeland health.

Rangeland Standards

For the rangeland health standards and livestock grazing guidelines document, search for the document by its complete title at http://www.blm.gov.

Wilderness Characteristics

Management Objective

Maintain wilderness characteristics on designated BLM lands.

Management Action

Wilderness characteristics would be maintained on the BLM lands that are listed in *Table 22* (*Lands with wilderness characteristics maintained under special management)* and shown in *Map 27 (Lands with wilderness characteristics)*, excluding the portions of those areas that occur on O&C lands that are suitable for permanent timber production.

Table 22. Lands with wilderness characteristics maintained under special management

BLM Lands	Total (acres)	Identified Wilderness Characteristics		
		Naturalness	Outstanding Opportunities for Solitude	Outstanding Opportunities for Primitive, **Unconfined** Recreation
Salem District				
Bull of the Woods/Opal Creek Additions	3,203	X	X	X
South Fork Clackamas River	919	X	X	
Salmon Huckleberry Additions	637	X	X	X
Mount Hebo	81	X	X	X
Eugene District				
No lands were identified with wilderness characteristics				
Roseburg District				
Special management would not apply to lands with wilderness characteristics				
Coos Bay District				
Wasson Creek	3,408	X	X	X
Medford District				
Special management would not apply to lands with wilderness characteristics				
Klamath Falls Resource Area				
No lands were identified with wilderness characteristics				
Total	8,248			

Wildlife

Management Objective

Provide for the conservation of species that are listed or are candidates for listing under the Endangered Species Act or state listed species where the BLM have entered into a cooperative management agreement for a species.

Management Actions

- Management would be consistent with approved recovery plans and designated critical habitat, including the protection and restoration of habitat and other actions designed to recover populations of species.
- Species listed under the state of Oregon Endangered Species Act would be managed in accordance with cooperative management agreements.
- Wildlife species with approved recovery plans include the marbled murrelet, bald eagle, and the Columbia River population of the Columbia white-tailed deer. Management would be consistent with these recovery plans. See *Appendix G. Wildlife*.
- For the western snowy plover, the BLM's contribution to recovery would consist of the following actions:
  - Public use of nesting areas would be managed during the nesting season to reduce activities that would substantially reduce nesting success.
  - Predator controls would be employed when data demonstrates that loss of nests due to predators substantially reduces overall nesting success.
  - Control measures would be implemented if invasive plant species are creating a loss of suitable nesting habitat.
  - Measures would be implemented to support coastal dune processes to sustain suitable western snowy plover nesting habitat.
- Activities would be restricted within threshold distances of active northern spotted owl nest sites identified through consultation from March 1 through September 30. Restrictions on activities would usually not be required for nest sites located near roads or in other areas of permanent human activity.
- Bald eagle management areas would be managed to protect current suitable nesting and winter roosting habitat and to develop replacement habitat for nesting and roosting. Management activities would include prescribed burns and other treatments to reduce fuel loading and to accelerate growth, such as commercial thinning and density management. See *Map 13 (Bald eagle, deer, and elk habitat management areas)*.

Management Objective

State listed species where the BLM has not entered into a conservation agreement and species listed by the BLM as sensitive or assessment species will be managed on public domain lands and on O&C lands where protection does not conflict with sustained yield forest management in areas dedicated to timber production. This is so that special status designation would no longer be warranted and so that actions will not contribute to the need to list the species under the Endangered Species Act. Where conflicts with sustained yield management occur, protections on O&C lands will only be applied to prevent extinction of a species even if it is not yet listed under the Endangered Species Act.

Management Actions

- Management would be consistent with approved conservation plans. See *Appendix G. Wildlife*.
- Protections measures include altering the type, timing, and intensity of actions; and other strategies designed to maintain populations of species.
- For the Columbia white-tailed deer, the record of decision for the North Bank Habitat Management Area would continue to be implemented. The final environmental impact statement and record of decision for the North Bank Habitat Management Area are incorporated by reference.
- For the greater sage grouse, the Greater Sage Grouse Conservation Assessment and Strategy for Oregon would continue to be implemented. It is incorporated by reference.

Management Objective

Assist the Oregon Department of Fish and Wildlife in meeting big game management goals on public domain lands and on O&C lands where the goals are consistent with the O&C Act.

Management Actions

- Roads would be closed to motorized vehicles within the designated deer and elk winter range to achieve a maximum level of 1.5 miles of open road per square mile of federal land between November 1 and April 15. Administrative use of all roads would occur, as needed, on a year-round basis. See *Map 13 (Bald eagle, deer, and elk habitat management areas)*.
- Roads would be closed to motorized vehicles, except for administrative purposes, between November 1 and April 15 in the Klamath Winter Range, which includes the deer-season road closure areas of South Gerber, Willow Valley, Harpold Ridge, Bryant Mountain, North Bryant, Windy Ridge, and Lorella. See *Map 13 (Bald eagle, deer, and elk habitat management areas)*.

- Visual barriers from 25 to 50 feet wide would be maintained, where appropriate, along roads within the designated deer and elk winter range. See *Map 13 (Bald eagle, deer, and elk habitat management areas)*.
- Native forage species would be planted along roadsides, skid trails, and on landings, or forage plots would be created when forage quality is determined to be a limiting factor in achieving the management goals of the Oregon Department of Fish and Wildlife.
- Forage would be included when implementing silvicultural treatments or habitat management activities.
- Encroaching western juniper would be thinned or removed to maintain and improve forage for big game. These treatments would protect old juniper and would consider edge effect, escape cover, and forage.

Administrative Actions

Administrative actions are routine transactions and activities that are required to serve the public and to provide optimum management of resources.

Administrative actions would occur at approximately the same levels as during the past 10 years. These actions would include:

- competitive and commercial recreation activities
- lands and realty actions (including the issuance of grants, leases, and permits)
- resolution of trespasses
- facility maintenance
- improvements to existing facilities
- road maintenance
- issuance of hauling permits
- recreation site maintenance
- recreation site improvement
- hazardous materials removal
- law enforcement
- surveys to determine legal land or mineral estate ownership
- engineering support to assist in mapping
- designing and implementing projects
- sampling (specifically using the *3P fall, buck, and scale* sampling method)
- incidental removal of trees, snags, or logs for safety or operational reasons

Administrative Withdrawal Land Use Allocation

The administrative withdrawal land use allocation includes lands that are withdrawn from the harvest land base for a variety of reasons, including:

- areas dedicated to specific purposes (such as roads, buildings, maintenance yards, quarries, and other facilities and infrastructure);
- areas of critical environmental concern and recreation sites (such as campgrounds, trails, and day use areas); and
- areas that are identified through the timber production capability classification (TPCC) system as withdrawn from sustained yield timber production or identified as nonforest.

Management Objectives and Management Actions

The management objectives and management actions for areas of critical environmental concern and recreation sites/facilities are addressed in the alternatives under the specific programs.

Areas identified as withdrawn from the harvest land base through the timber production capability classification system do not have specific management objectives or management actions. They may be managed similarly to the adjacent or surrounding land use allocations, if those uses are not incompatible with the reason for which the lands were withdrawn (as identified by the timber production capability classification codes). Additional areas would be periodically added to those areas withdrawn through updates to the timber production capability classification system when on-the-ground examinations indicate an area meets the criteria for withdrawal.

Roads, maintenance yards, buildings, quarries, and other facilities also do not have specific management objectives or management actions but would be managed for the purpose for which the facilities were constructed.